

Foray® 48B

ISSUED 06/14/01

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: Foray® 48B - Not For Use in Canada

EPA Registration No. 73049-46

List Number: 60175 * 60178 * 60179 * 60180

MANUFACTURER: Valent BioSciences Corporation
870 Technology Way, Suite 100
Libertyville, Illinois 60048

EMERGENCY TELEPHONE NUMBERS

Emergency Health or Spill:

Outside the United States: 1-651-632-6184

Within the United States: 1-877-315-9819

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME: Bacillus thuringiensis, var. kurstaki

CAS/RTECS NUMBERS: 68038-71-1, N/A

OSHA-PEL

8HR TWA: N/L

STEL: N/L

CEILING: N/L

ACGIH-TLV

8HR TWA: N/L

STEL: N/L

CEILING: N/L

OTHER LIMITS

8HR TWA: N/A

STEL: N/A

CEILING: N/A

INGREDIENT NAME: Inert ingredients - identity withheld as a Trade Secret

CAS/RTECS NUMBERS: N/A, N/A

OSHA-PEL

8HR TWA: N/L

STEL: N/L

CEILING: N/L

ACGIH-TLV

8HR TWA: N/L

STEL: N/L

CEILING: N/L

OTHER LIMITS

8HR TWA: N/A

STEL: N/A

CEILING: N/A

EEC (European Community): N/D

Symbol Designation: N/A

Risk Phrases: N/A

Safety Phrases: S2 Keep out of reach of children. S3 Keep in a cool place. S13 Keep away from food, drink and animal feeding stuffs.

3. HAZARDS INFORMATION

EMERGENCY OVERVIEW: This material may cause transient skin and eye irritation.

ROUTE(S) OF ENTRY:

Skin: No

Inhalation: No

Ingestion: No

INGESTION RATING: None

SKIN ABSORPTION RATING: None

INHALATION RATING: N/D

CORROSIVENESS RATING: None

SKIN CONTACT RATING: None

SKIN SENSITIZATION RATING: N/D

EYE CONTACT RATING: None

TARGET ORGANS: Possibly skin, eyes and respiratory tract

CARCINOGENICITY RATING:

NTP: N/L

IARC: N/L

OSHA: N/L

ACGIH: N/L

None

SIGNS AND SYMPTOMS: N/D. May cause skin, eye, and respiratory irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: N/D

4. FIRST AID MEASURES

EYES: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

SKIN: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INGESTION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INHALATION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

5. FIRE FIGHTING PROCEDURES

FLASH POINT: N/D

FLASH POINT METHOD: N/D

LOWER EXPLOSIVE LIMIT(%): N/D

UPPER EXPLOSIVE LIMIT(%): N/D

AUTOIGNITION TEMPERATURE: N/D

FIRE & EXPLOSION HAZARDS: N/D

EXTINGUISHING MEDIA: Use appropriate medium for the underlying cause of the fire.

FIRE FIGHTING INSTRUCTIONS: Wear protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

SPILL OR RELEASE PROCEDURES: Recover product and place in an appropriate container for disposal. Ventilate and wash the spill area.

7. HANDLING AND STORAGE

HANDLING: Avoid dust generation and provide room ventilation during handling.

STORAGE: Store in a cool, dry place. Keep containers tightly closed when not in use. Store in temperatures above freezing and below 32 C (90 F).

SPECIAL PRECAUTIONS: Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust
RESPIRATORY PROTECTION: Air purifying respirator with dust/mist filter (N95), if necessary.

SKIN PROTECTION: Impervious.

EYE PROTECTION: Goggles.

OTHER PROTECTION: Wear tyvek coveralls if contact may occur.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Light brown suspension

ODOR: Pungent, bacterial

BOILING POINT: N/D

MELTING/FREEZING POINT: N/D

VAPOR PRESSURE (mm Hg): N/D

VAPOR DENSITY (Air=1): N/D

EVAPORATION RATE: N/D

BULK DENSITY: 1.12-1.2 g/cm3

SPECIFIC GRAVITY: N/D

SOLUBILITY: Readily mixable with water

pH: 4.1-4.8 as a 10% solution in water

VISCOSITY: N/D

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Not chemically reactive.

INCOMPATIBILITIES: Alkalinity inactivates product.

HAZARDOUS DECOMPOSITION PRODUCTS: Not known to occur.

HAZARDOUS POLYMERIZATION: Not known to occur.

11. TOXICOLOGICAL INFORMATION

ORAL TOXICITY: N/D. LD50 > 5000 mg/kg in rats for a similar formulation. EPA Category IV.

DERMAL TOXICITY: N/D. LD50 > 2500 mg/kg in rabbits for a similar formulation. EPA Category III.

INHALATION TOXICITY: N/D. A similar formulation was not lethal in an inhalation study at the maximum achievable concentration of 6.81 mg/L. EPA Category IV.

CORROSIVENESS: N/D. A similar formulation was not corrosive.

DERMAL IRRITATION: N/D. A similar formulation had slight skin reactions up to 24 hrs after treatment. EPA Category IV.

OCULAR IRRITATION: N/D. A similar formulation was mildly irritating, which was reversible within 7 days. EPA Category III.

DERMAL SENSITIZATION: N/D

SPECIAL TARGET ORGAN EFFECTS: N/D

CARCINOGENICITY INFORMATION: N/D

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Studies on non-targets have been performed without identifying any organisms at risk. The following species have been included in the testing. Mammals (rats, rabbits), Freshwater aquatic invertebrate (Daphnia Magna, Rainbow Trout), Birds (Mallard Duck, Bobwhite), Non-target insects (Green Lacewing Larvae, Hy-menopteran Pedibus Foveolatus, Ladybird Beetles, Honey Bee).

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Dispose of product in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

DOT

STATUS: Not Regulated

PROPER SHIPPING NAME: N/D

HAZARD CLASS: N/D

UN NUMBER: N/D

PACKING GROUP: N/D

REPORTABLE QUANTITY: N/D

IATA/ICAO

STATUS: Not Regulated

PROPER SHIPPING NAME: N/D

HAZARD CLASS: N/D

UN NUMBER: N/D

PACKING GROUP: N/D

REPORTABLE QUANTITY: N/D

IMO

STATUS: Not Regulated

PROPER SHIPPING NAME: N/D

HAZARD CLASS: N/D

UN NUMBER: N/D

PACKING GROUP: N/D

REPORTABLE QUANTITY: N/D

FLASH POINT: N/D

15. REGULATORY INFORMATION

TSCA STATUS: Exempt

CERCLA STATUS: N/D

SARA STATUS: N/D

RCRA STATUS: N/D

PROP 65 (CA): N/D

16. OTHER INFORMATION

LEGEND:

N/A = Not Applicable

N/D = Not Determined

N/L = Not Listed

L = Listed

C = Ceiling

S = Short-term

(R) = Registered Trademark of Valent BioSciences

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